

Appl. No. 10/700,131
Atty. Docket No. 9408
Reply dated February 13, 2006
Reply to Office Action of September 13, 2005
Customer No. 27752

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A three-dimensional product comprising a structure having a first surface and a z-direction perpendicular to the first surface, the structure further comprising a base, a plurality of raised protrusion areas raised at least about 300 μm to less than 5,000 μm above the base of the structure, and a plurality of connecting elements, each connecting element ending at a raised protrusion and each connecting element raised above the base of the structure in the z-direction and at least partially recessed from the raised protrusions in the z-direction, wherein the connecting elements connect two of the raised protrusions areas;
the plurality of raised protrusion areas and plurality of connecting elements together forming a pattern comprising at least a first sub-pattern region and a second sub-pattern region; wherein the first sub-pattern region comprises a first set of parallel rows of raised protrusion areas and connecting elements and a second set of parallel rows of raised protrusions and connecting elements which are not parallel to the first set of parallel rows and the first sub-pattern region is structurally distinguishable from the second sub-pattern region.
2. (Original) The three-dimensional product according to Claim 1 wherein the first sub-pattern region comprises a first set of parallel rows of raised protrusion areas and connecting elements and a second set of parallel rows of raised protrusions and connecting elements which are not parallel to the first set of parallel rows and the second sub-pattern region does not comprise any protrusions or connecting elements.
3. (Original) The three-dimensional product according to Claim 1 wherein the first sub-pattern region comprises at least two sets of parallel rows of alternating protrusions and

Page 2 of 16

BEST AVAILABLE COPY

Appl. No. 10/700,131
Atty. Docket No. 9408
Reply dated February 13, 2006
Reply to Office Action of September 13, 2005
Customer No. 27752

connecting elements, and the second sub-pattern region comprises at least two sets of parallel rows of alternating protrusions and connecting elements wherein the first and second sub-pattern regions are structurally distinguishable due to rotation, reduction or magnification, or alteration of the pattern in the first sub-pattern region.

4. (Original) The three-dimensional product according to Claim 3 wherein the first sub-pattern region comprises at least two sets of parallel rows of alternating protrusions and connecting elements, and the second sub-pattern region comprises at least two sets of parallel rows of alternating protrusions and connecting elements which are rotated so they are not parallel to the parallel rows of the first sub-pattern region.

5. (Original) The three-dimensional product according to Claim 1 wherein the height of the raised protrusion area above the base is at least about 650 μm .

6. (Original) The three-dimensional product according to Claim 1 wherein the pattern of raised protrusion areas and connecting elements comprises more than two sub-pattern regions.

7. (Original) The three-dimensional product according to Claim 1 wherein the pattern of sub-pattern regions comprises a repeating pattern of the sub-pattern regions.

8. (Original) The three-dimensional product according to Claim 1 wherein the structure is formed from a material selected from the group consisting of uncoated or coated paper, polymeric or plastic films, cloths or fabrics, wovens, nonwovens, laminates, metal foils, and combinations thereof.

9. (Currently amended) The three-dimensional product according to Claim 8 A three-dimensional product comprising a structure having a first surface and a z-direction perpendicular to the first surface, the structure further comprising a base, a plurality of raised protrusion areas raised at least about 300 μm to less than 5,000 μm above the base of the structure, and a plurality of connecting elements, each connecting element ending at a raised protrusion and each connecting element raised above the base of the structure

Page 3 of 16

BEST AVAILABLE COPY

Appl. No. 10/700,131
Atty. Docket No. 9408
Reply dated February 13, 2006
Reply to Office Action of September 13, 2005
Customer No. 27752

in the z-direction and at least partially recessed from the raised protrusions in the z-direction, wherein the connecting elements connect two of the raised protrusions areas; the plurality of raised protrusion areas and plurality of connecting elements together forming a pattern comprising at least a first sub-pattern region and a second sub-pattern region; wherein the first sub-pattern region comprises a first set of parallel rows of raised protrusion areas and connecting elements and a second set of parallel rows of raised protrusions and connecting elements which are not parallel to the first set of parallel rows and the first sub-pattern region is structurally distinguishable from the second sub-pattern region wherein the structure comprises a tissue-towel paper product, and wherein the structure is formed from a material selected from the group consisting of uncoated or coated paper, polymeric or plastic films, cloths or fabrics, wovens, nonwovens, laminates, metal foils, and combinations thereof.

10. (Original) The three-dimensional product according to Claim 9 wherein the pattern of protrusions and connecting elements is formed by an embossing process.

11. (Original) The three-dimensional product according to Claim 10 wherein the pattern of protrusions and connecting elements is formed by a deep-nested embossing process.

12. (Withdrawn) A tissue-towel paper product comprising an embossing pattern that conveys greater than one communicated image by rotating the viewing angle of the product or altering the lighting angle or intensity.

13. (Withdrawn) The tissue-towel paper product according to Claim 12 that conveys one communicated image when viewed from a first viewing angle and conveys a second communicated image when viewed from a second viewing angle resulting from an angle change selected from the rotation of the around the z-dimension of the product, a change of viewing angle between the z-coordinate and the viewing line, the change in the surface topography, or combinations of these.

14. (Withdrawn) The tissue-towel paper product according to Claim 12 wherein the product is in a roll form and the product conveys a first communicated image when

Page 4 of 16

BEST AVAILABLE COPY

Appl. No. 10/700,131

Atty. Docket No. 9408

Reply dated February 13, 2006

Reply to Office Action of September 13, 2005

Customer No. 27752

viewed from a viewing angle on the z-coordinate above the roll and conveys a second image when viewed from the same viewing angle after rotating the roll on its axis.

Page 5 of 16

BEST AVAILABLE COPY